

MV OCEAN DISCOVERY

VESSEL SPECIFICATIONS

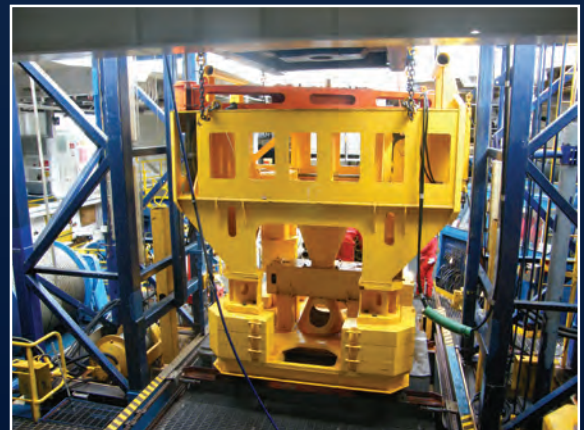


The MV Ocean Discovery is a dedicated geotechnical vessel operating world wide. The vessel is equipped with a DP1 system and a 4 point mooring system.

The MV Ocean Discovery has a permanently installed range of drilling, in situ testing and sampling equipment which is interchangeable at sea and deployed through a central weather protected moonpool. This enables the vessel to perform integrated investigations during one mobilisation to site.

The MV Ocean Discovery is part of the Gardline fleet of vessels and has been designed to support the following key areas:

- *Wind Farm Geotechnical Investigations*
- *Site surveys for exploration jack ups*
- *Calibration of geophysical data*
- *Deep push Cone Penetration Testing*
- *Offshore laboratory testing*
- *Route and site surveys ranging from nearshore to deep ocean.*



**GARDLINE
GEOSCIENCES**

VESSEL DETAILS

Name	Ocean Discovery
Type	Geotechnical Survey Vessel
Year of Build	1983 Converted 2010
Flag	United Kingdom
Classification	BV
Call sign	2DAU3

DIMENSIONS

Length overall	86.90m
Beam	18m
Draft	7m
GRT	4027 T
NRT	1208 T
Moonpool	3.6 x 3.5m

ACCOMMODATION

Berths	50 (+1 Hospital)
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PROPULSION AND MACHINERY

Main Engine	Bergen Diesel KVBM
Propulsion	CPP and 2 x Schottel azimuth thruster units
Bow thrusters	2 X Brunvol
Generators	4 x Cummins KTA 19 2x Wartsila W200
Maximum speed	12 Knots
Cruising speed	8 Knots

CAPACITIES

Fresh Water	111m ³
Fuel oil	1242m ³
Endurance	28 days

MOORING SYSTEM

4 point mooring	4 x 4.0T Delta Flipper Anchors
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DYNAMIC POSITIONING

Type	Kongsberg C-Pos
Reference systems	2 x DGPS starfix Fan beam HPR

NAVIGATION

Primary system	DGPS Starfix HP/L1
Secondary system	DGPS Starfix HP/L1
Tertiary system	GPS + SBAS (WAAS & EGNOS)
Gyrocompass	2 x SG Brown
Echosounder	Simrad EA 400 GPT single beam

COMMUNICATIONS

Emergency GMDSS Radios	4 x Jotron
Navtex Receiver	FURUNO NX-500
Sat-C	FURUNO FELCOM 15
MF/HF DSC	SAILOR HC4500B
HVF Icom	IC-M71
Telephone system	Fleet 77 FURUNO SF 870
Fleet broadband	Skipper 150 Wideye

SAFETY EQUIPMENT

Life Rafts	8 x Surviva MK 4
Immersion suits	62 x Crew saver, Piel, Norse & Aquata
Life jacekst	76 x Aquaguard & Avant
Work vests	10 x Crew Saver 275N
BA sets	4 x Contour 100
PLBs	12 x Sea Marshall AU9
EPIRB	1 x Tron 40S MKII 406 MHz
SART	2 x Tron Sart
Parachute flares	12
Hand flare	12
Line throwing apparatus	4

CAPABILITIES

DRILLING SYSTEM

Derrick	24m API Certified
Drawworks	Pullmaster M50
Top drive	Wirth Type 3-5
Heave compensation	3m stroke
Mud pump	Gardner-Denver FXEB (FD-FXE), Size 5 1/2" x 10
Mud tanks	2 x 3000 litre, 1 x 4000 litre
Drill string	5" API with 4" ID
Seabed frame	12 Tonnes
Stern mounted A Frame	5 T SWL

DOWNHOLE SAMPLING AND TESTING

Wiscon APB	3m CPT tool 1m CPT tool 1m Shelby sampler 1m Piston sampler
Rock coring	PQ3 core barrel

SEABED SAMPLING AND TESTING

Seabed CPT	200kN moonpool deployed unit
Vibrocorer	5m system

GEOTECHNICAL LABORATORY

Photography
Sample description
Moisture Content
Bulk/Dry Density
Laboratory Vane
Pocket Penetrometer
Torvane
Unconsolidated Undrained Triaxial
Point Load Test



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